

BEFORE THE  
ILLINOIS COMMERCE COMMISSION

IN THE MATTER OF: )  
 )  
ILLINOIS COMMERCE COMMISSION )  
ON ITS OWN MOTION, )  
 ) No. 06-0525  
 )  
Consideration of the federal )  
standard on interconnection in )  
Section 1254 of the Energy Policy )  
Act of 2005.

Public Forum  
160 North LaSalle Street  
Chicago, Illinois  
May 20, 2008

Met pursuant to notice at approximately 10:00 a.m.

BEFORE :

MR. ROBERT BENSKO, Chief Public Hearing Officer.

ALSO PRESENT:

Commissioner Robert F. Lieberman

Mr. David Rearden, ICC Staff

SULLIVAN REPORTING COMPANY, by  
Tracy L. Overocker, CSR

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1           CHIEF PUBLIC HEARING OFFICER BENSKO:   Good  
2   morning, everybody.   Sorry for the delay.   My name is  
3   Robert Bensko and I'm the Chief Public Hearing  
4   Officer for the Illinois Commerce Commission.

5           Today before us we have a public  
6   hearing to speak about some things that are before  
7   the Commission.   I brought Dave Rearden with me  
8   today.   Dave will answer any technical questions that  
9   you might have pertaining to the case from the Staff  
10   standpoint.   I can answer any procedural questions  
11   from the legal standpoint for the Commission.   And  
12   what I will do is the list that you guys have signed  
13   up on, I will go off of that particular list.

14           I'd first like to ask both of the  
15   companies, one at a time, to step forward to give a  
16   brief overview in what's being asked and their  
17   positions on the case.   Then we will go with the list  
18   of who has signed in to speak today.   I guess I'll  
19   start with Peter Millburgh (phonetic) from Ameren.

20           MR. PETER MILLBURGH:   Good morning.   My name is  
21   Peter Millburgh and I'm representing the Ameren  
22   Illinois utilities of AmerenCILCO, AmerenCIPS and

1 Ameren Illinois Power. We appreciate the opportunity  
2 to provide comments on the proposed new Part 466 of  
3 the Commission's Administrative Rules as published in  
4 the Illinois register commonly known as the Electric  
5 Interconnection of Distributed Generation.

6 The Ameren Illinois utilities support  
7 the development of standardized interconnection rules  
8 for generation facilities on electric distribution  
9 circuits.

10 We appreciate the benefits to both the  
11 generator operators and the electric distribution  
12 companies from having consistent accessible and  
13 balanced rules governing interconnections and we  
14 generally support the proposed rule implementing  
15 these standards.

16 As noted in our filed comments and  
17 reply comments, though, there are several provisions  
18 within the proposed rule that we feel could be  
19 improved. These provisions include the codification  
20 of interconnection documents into a rule and the  
21 indemnification requirements as envisioned within the  
22 proposed rule.

1                   Additionally, there are several issues  
2    which surfaced during the reply comment process which  
3    caused us concern and we'll address two of these in  
4    our statement today. These concerns include the safe  
5    installation and operation of generation units and  
6    the need to review applications on specific circuits  
7    sequentially.

8                   Our concerns regarding codification of  
9    these procedures into a rule are due to the novelty  
10   of standardized interconnection processes for  
11   distribution systems. Existing procedures and  
12   implementation methods for interconnecting generators  
13   to the electric distribution system vary  
14   significantly from state to state and as yet, no best  
15   practices have been tested and proven.

16                  While we believe that the bulk of the  
17   proposed rules will be workable, neither we nor any  
18   party to this process has any assurance that all  
19   parts of the rule and all documents will ultimately  
20   further the Commission's goal of enabling generation  
21   facilities to connect to the electric distribution  
22   system in a timely, safe and cost-effective manner.

1                   We believe that a better approach to  
2   achieve the Commission's goals would be to place the  
3   appendices of the proposed rule under the review and  
4   approval of the Commission outside of the rulemaking  
5   process. This will provide a more timely review and  
6   response process to address barriers or problems  
7   created by the appendices. It would also enable the  
8   implementation provisions of the rules to reflect any  
9   technological, regulatory or practical operational  
10   developments that can't currently be predicted.

11                  The other primary opportunity for  
12   improvement is the removal of the mutual  
13   indemnification language within the proposed rule.  
14   Our recommendation is based on longstanding  
15   Commission policy and our practical experience in  
16   responding to damage claims. To keep rates low, the  
17   Commission has long limited the potential liability  
18   of electric distribution companies and recognize the  
19   responsibilities of parties, like generators, to  
20   ensure and protect themselves from losses.

21                  Our practical experience bears out the  
22   wisdom of this policy. We, and other utilities, are

1 typically viewed as deep pockets and get included in  
2 many legal proceedings where our connection to the  
3 incident is tenuous at best.

4                   Requiring mutual indemnification  
5 provides no additional benefit to our customers,  
6 investors, or the generator owners or operators.  
7 Instead, it will provide yet another tenuous  
8 connection to be used primarily in frivolous lawsuits  
9 whose defense will have resulted in increased legal  
10 costs borne by ratepayers.

11                   Other states with distributed  
12 generation rules in place share this approach to  
13 indemnification. For example, both California and  
14 Maryland considered indemnification and neither state  
15 included indemnification language in their rules.

16                   As noted earlier, the Ameren Illinois  
17 utilities are also concerned about some of the issues  
18 that have surfaced during the reply comment period.  
19 One of the most important issues centers on safety  
20 and the use of an inexpensive switch already required  
21 by the National Electric Code to help provide for  
22 both the safety of our employees and customers.

1                   The safety of our employees and the  
2   public is an overarching value for all of the Ameren  
3   companies. Our focus on safety is a critical  
4   component of our strategic plan and we spent  
5   substantial personal and financial resources to  
6   create a safety culture within our companies and the  
7   communities we serve. We appreciate that the other  
8   parties to this rulemaking also value the safety of  
9   our employees and our customers. However, out of  
10  what appears to be an unfounded concern about  
11  creating an undue cost burden for generator  
12  operators, some have requested that the installation  
13  of a commonly available and inexpensive disconnect  
14  switch be optional.

15                 Ameren supports keeping the visible  
16  disconnect switch as a requirement for these  
17  installations. It's a straightforward requirement  
18  based on common sense and practical experience.

19                 We believe a similar lack of  
20  understanding may be the source of confusion over the  
21  value of sequencing applications for particular  
22  electric distribution circuits. The installation of



1 generation can change virtually all the line  
2 protection and operation schemes on that particular  
3 distribution circuit. Even if the same size machines  
4 are installed at the same physical location, each  
5 generator creates a unique impact on the distribution  
6 system due to any and all the developments which  
7 precede it.

8                   In order to develop accurate reviews  
9 of proposed generator facilities and to ensure for  
10 the continued reliability of the distribution system  
11 in providing service to load customers, each  
12 applicant must be reviewed individually and  
13 completely before moving to the next applicant for  
14 that circuit. The time frames and expedited review  
15 checklist in the proposed rule ensure that these  
16 reviews will be conducted in a timely manner.

17                   The combination of sequential review  
18 and defined review time frames provides the desired  
19 balance between speed and accuracy in the review  
20 process.

21                   Again, these highlights -- these  
22 comments highlights some of the primary concerns of

1 the Ameren Illinois utilities with regard to the  
2 proposed distributed generation interconnection rule.  
3 We support the development of the standardized  
4 interconnection rules for generators on electric  
5 distribution circuits and we believe that the  
6 proposed rule is generally acceptable with the  
7 changes identified both in our comments and today's  
8 statement.

9 Thank you again for the opportunity to  
10 participate in this hearing.

11 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank  
12 you, Mr. Millburgh.

13 From Commonwealth Edison, Mike Pabian.  
14 And, folks, when you step up, please state your name  
15 and spell it so that the court reporter has an  
16 accurate record.

17 MR. PABIAN: Good morning. My name is Michael  
18 Pabian, P-a-b-i-a-n, representing Commonwealth Edison  
19 Company. My comments here will be brief. The --  
20 Commonwealth Edison Company's positions on the docket  
21 have already been filed and comments and reply  
22 comments in the proceeding. We would like to note,

1     however, that Staff -- and thank Staff for the yeoman  
2     work that they did in conducting the workshop process  
3     which extended through many meetings over a period in  
4     excess of a year and a half with participants of all  
5     members of -- various members of the industry, not  
6     limited to those parties that were merely parties to  
7     the case. And as a result of that process -- through  
8     thoughtful deliberation -- came up with a proposed  
9     set of rules dealing with expedited procedures for  
10    small interconnectors. While we don't -- while ComEd  
11    believes that there are improvements that could be  
12    made to that suggestion -- to that proposal and has  
13    made those suggestions known in its comments and  
14    reply comments, that should not detract in the least  
15    from the work product that Staff put out.

16                     Thank you very much.

17             CHIEF PUBLIC HEARING OFFICER BENSKO: Thank  
18    you, sir.

19                     From the City of Chicago, David  
20    O'Donnell.

21                     If you have written comments that  
22    you'd like to leave with me today, you can do that

1     also.

2             MR. DAVID O'DONNELL:   Good morning.   My name is  
3     David O'Donnell, O, apostrophe, D-o-n-n-e-l-l, Deputy  
4     Commissioner at the City of Chicago's Development of  
5     Environment.   I'm pleased to be before you today to  
6     discuss the merits of clearly defined interconnection  
7     rules for both distributed and cogeneration power  
8     systems.

9                     The City of Chicago has long promoted  
10    the use of renewable power in our own facilities and  
11    by citizens and businesses of Chicago.   The promotion  
12    of renewable and distributed power meets two key  
13    goals of the City's energy policies.   One, the  
14    increased reliability of the electric generation  
15    system through decentralized power generation.   And,  
16    two, the promotion of cleaner sources of energy.

17                    In 2001, the City of Chicago developed  
18    the Chicago Energy Plan.   The plan calls for meeting  
19    future electricity demand more quickly and  
20    efficiently through a mix of energy efficiency,  
21    renewable energy and distributed generation and  
22    cogeneration.

1                   We estimate by adopting the  
2   distributed generation and cogeneration goals set by  
3   the plan that we have a potential to reduce CO2  
4   emissions by .685 million metric tons from cleaner  
5   electric generation and by .43 million metric tons  
6   from reduced natural gas use.

7                   Since 2000, the City of Chicago has  
8   implemented several specific efforts to promote the  
9   use of cogenerations and distributed renewable  
10   generation within the city of Chicago. These efforts  
11   include solar installations in schools, museums, City  
12   colleges and on City facilities. The attraction of  
13   solar power companies to the City which have  
14   generated and created a significant number of good  
15   paying manufacturing jobs; technical assistance in  
16   preparing combined heat and power feasibility studies  
17   for more than 20 private and public actors with a  
18   special emphasis on our area hospitals; participation  
19   in the planning and implementation of workshops,  
20   seminars and other activities aimed at developing the  
21   market for combined heat and power.

22                   Through these efforts, the City has

1 identified again and again the lack of uniformed  
2 interconnect standards as a barrier to the  
3 installation of distributed and cogeneration systems  
4 and an unnecessary complication for smaller  
5 installations such as the ones at our police and fire  
6 stations.

7 ComEd's approach of individual utility  
8 tariffs for such installations creates a lack of  
9 certainty in the market for these critical  
10 technologies and adds additional and unnecessary  
11 costs to projects which are already saddled with  
12 difficult financing prospects due to their novelty.

13 Clearer standards need to be defined  
14 in order to address these barriers and ComEd's  
15 proposal that each utility retain discretion to  
16 define its own reasonable rules and to establish  
17 procedures and requirements unique to its service  
18 area leaves the present process of interconnection  
19 essentially unchanged.

20 A frame work of clearly defined  
21 customer rights and concurrent utility obligations is  
22 needed to ensure that connections occur in a

1 reasonable and timely and routine fashion.

2                   The City requests that the Commission  
3 adopt proposed Part 466 modified to include the  
4 modest revisions recommended in the initial comments  
5 provided by the City, The Environmental Law and  
6 Policy Center and the Interstate Renewable Energy  
7 Council.

8                   Uniformed detail regulations governing  
9 the rights and obligations of utilities and  
10 interconnecting parties are critical to the expansion  
11 of distributed generation in the city and by  
12 extension, the improvement of grid reliability, the  
13 expansion of cleaner sources of power and the  
14 creation of a more resilient and productive local  
15 economy.

16                   Thank you very much for your time.

17                   CHIEF PUBLIC HEARING OFFICER BENSKO: Thank you  
18 very much for your comments.

19                   Right now I'd like to ask Brad Klein  
20 from the ELPC to step forward.

21                   MR. KLEIN: Good morning. Thanks to the  
22 Commission and thanks also to Mr. Bensko for

1 organizing the hearing. I'm Brad Klein, an attorney  
2 from the Environmental Law and Policy Center,  
3 K-l-e-i-n, we're a nonprofit legal and environmental  
4 advocacy organization. Involved in this rulemaking  
5 because Illinois is in the midst of a transformation  
6 moving from an old system exclusively reliant on  
7 large central power plants to a new distributed model  
8 of electricity generation.

9                   There will be many benefits of this DG  
10 revolution; more diversified sources of energy, a  
11 more secured system, fewer transmission bottlenecks  
12 and line losses because energy will be generated  
13 closer to the load; more efficient use of resources  
14 and ultimately a cleaner environment.

15                   There are many people in the room  
16 today because they share this vision but have been  
17 frustrated by barriers that are preventing us from  
18 fully achieving it. Simply put the time, cost and  
19 complexity of the interconnection process is  
20 preventing many projects from becoming a reality and  
21 is slowing down this transformation.

22                   The Illinois Commerce Commission needs



1 to take action to remove these barriers to a DG  
2 future. By adopting interconnection standards based  
3 on best practices from around the country, Illinois  
4 can set the foundation for diversified energy  
5 sources, economic growth and a clean environment.

6 Just to provide a quick overview of  
7 the process up to this point, jurisdiction over  
8 interconnections is split between the federal  
9 government and states. The federal energy regulatory  
10 Commission, PJM and MISO, have their own rules and  
11 procedures for interconnection, but Illinois does  
12 not.

13 In recent years, a significant number  
14 of states have acted to standardize and streamline  
15 the interconnection process at the state level.  
16 Illinois began taking steps as early as 1999 and  
17 moving into the early 2000s. These discussions  
18 included several workshops and even led to the  
19 creation of a model rule which ultimately foundered  
20 in 2003 and '04, and some of the people in the room  
21 today were involved in the process at that time.

22 The Commission opened the present

1     docket in July of 2006 in response to the Energy  
2     Policy Act of 2005. This federal statute required  
3     states to consider adopting rules based on best  
4     practices of interconnection for distributed  
5     generation.

6                     As previous speakers have noted, for  
7     the past year and a half, the electric utilities and  
8     a small group of interested parties have been working  
9     with the Staff of the Commission to develop model  
10    procedures that would be consistent with the federal  
11    standard. This process has involved many phone calls  
12    and meetings and filings and we appreciate Staff's  
13    diligence in developing a model rule.

14                    As a result of this process, the  
15    Commission published a draft rule in the Illinois  
16    Register in April. The public comment period runs  
17    through the end of May. This comment period is the  
18    chance for the Commission to hear directly from those  
19    with experience with the interconnection process in  
20    Illinois and from those that will be directly  
21    affected by this rule.

22                    This process -- this public comment

1 process is extremely important because most members  
2 of the public don't have the resources to participate  
3 in a two-year-long docketed proceeding at the  
4 Commission, but they do have real-world experience  
5 and expertise that's critical to the Commission's  
6 decision making process.

7 I'm going to stand aside in a minute  
8 and let others describe their thoughts and concerns  
9 regarding the draft rule, but I just wanted to  
10 quickly summarize ELPC's comments on the rules that  
11 are also included in our comments and reply comments  
12 in the docket.

13 Overall, we can't emphasize enough the  
14 importance of adopting streamlined interconnection  
15 procedures in a Commission rule. A rule provides a  
16 certainty and clarity that the industry really needs  
17 to grow. Our concerns with the rule generally break  
18 into two categories of issues. There are issues  
19 involving the smaller renewable generators,  
20 typically, wind and PV systems; and then concerns --  
21 somewhat separate concerns for the larger industrial  
22 generators like cogeneration and CHP.

1                   Overall, we think the rule does a  
2   fairly good job streamlining the process for the  
3   small generators, although there are a couple of  
4   remaining sticking points there. Most notable is the  
5   blanket requirement that all generators be equipped  
6   with an external disconnect switch. You'll hear from  
7   several people in the room today that have experience  
8   with these small systems and they'll tell you why the  
9   switch is redundant and bad policy to leave in place  
10  for the smaller inverter-based systems.

11                  Small systems are also particularly  
12  sensitive to other costs. The Commission should seek  
13  to minimize these costs to the extent possible and  
14  should reject other proposals that would propose  
15  unjustified insurance and liability requirements for  
16  small generators.

17                  For larger generators, the rule, in  
18  our view, is more problematic. First of all, the  
19  rule leaves some of the largest generators in a  
20  regulatory black hole. They have no access to either  
21  state or federal procedures. You'll hear from one  
22  project developer today that was left to argue

1     unsuccessfully before FERC for federal jurisdictional  
2     coverage because there was no protection available  
3     under state rules.

4                 Secondly, there are some unjustified  
5     technical requirements that still remain in the rule  
6     that will undermine the expedited process for  
7     cogeneration and other DG that's not designed to  
8     export power to the grid. These are the systems that  
9     are built to offset load and not to actually send  
10    power back onto the system; and several  
11    representatives from the DG industry will explain why  
12    these technical glitches will prevent what's referred  
13    to as the level three expedited review pathway in the  
14    rule from living up to its potential.

15                Third, the rule has some unfavorable  
16    terms for customer deposits, information sharing  
17    requirements and other business practices. You'll  
18    hear from some project developers that will explain,  
19    for example, why a 100 percent customer deposit up  
20    front is a -- can be a serious financial obstacle for  
21    larger projects; and there are some other aspects  
22    of -- business practice aspects for the larger

1 generators that are concerned that you'll hear about  
2 today.

3 In sum, the parties have proposed  
4 detailed language in their most recent round of  
5 filings. I'll refer you to the ELPC, the City of  
6 Chicago and the Interstate Renewable Energy Council  
7 filings that would correct these problems and lay the  
8 foundation for the transformation to a distributed  
9 model of electricity generation.

10 The Commission has the authority to --  
11 and the responsibility to ensure that the state is  
12 prepared for this transformation and is not left  
13 behind.

14 Thank you once again for this forum to  
15 help the Commission achieve this vision for the  
16 future.

17 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank  
18 you, Mr. Klein.

19 Bruce Papiech -- if I mispronounce  
20 your name today, don't crucify me, please.

21 MR. BRUCE PAPIECH: It's Bruce Papiech,  
22 P-a-p-i-e-c-h, wind developer out in North Central

1     Illinois and we are the ones that had the problem  
2     with the nonjurisdictional line and filed with FERC  
3     and got turned down where they said they had no  
4     jurisdiction of it, so we were left with -- the  
5     ruling from ComEd with no recourse; and then in  
6     future projects that we have going right now, we have  
7     is a 120-megawatt project going in on what they  
8     classify as a distribution line. So if your rules  
9     are limited to 10 megawatts or below, I have a lot of  
10    projects that are totally left in the hole. I've got  
11    other 125 megawatt projects on distribution lines and  
12    other projects in the works that will be on them as  
13    well.

14                   Our 125-megawatt project is on 138 kV  
15    line which they classify as distribution. They have  
16    a line that runs from Dixon, Illinois, to Aurora  
17    that's 138 kV, that's jurisdiction transmission lines  
18    but every radio feeder that goes out from them to  
19    service the towns they classify as distribution. So  
20    if you connect into there, which we are, you have --  
21    FERC has no jurisdiction in -- without this being  
22    increased, you guys have no jurisdiction either, so

1     then we're left to what ComEd can do and when they  
2     can do it with no recourse and it has taken an  
3     exorbitant amount of time to get these things  
4     through.

5                     We have also been subject to  
6     distribution charges and other charges that limit  
7     where we can sell our electricity on these lines as  
8     well. That's it.

9             CHIEF PUBLIC HEARING OFFICER BENSKO: Thank you  
10    very much.

11                    Brandon Leavitt, Solar Service.

12             MR. BRANDON LEAVITT: Brandon Leavitt,  
13    L-e-a-v-i-t-t. I'm the president of Solar Service,  
14    we're Illinois' oldest, largest supplier of renewable  
15    energy systems for homes, schools, businesses,  
16    institutions. Primarily our work involves solar  
17    thermal, heating and hot water. The last few years,  
18    we've seen the demand for clean energy electric  
19    systems arising and we've done a couple dozen systems  
20    including in the Ameren and ComEd areas.

21                    I'm here to speak on a couple  
22    subjects; but primarily, I believe that the rule for



1 the external disconnect switch is superfluous and  
2 unnecessary. We've heard from public safety  
3 officials, they rarely encounter a problem, some need  
4 it; the inverters today are extremely unreliable and  
5 it's an unnecessary expense.

6 Also --

7 CHIEF PUBLIC HEARING OFFICER BENSKO: Can I  
8 interrupt you for one second, I'm sorry. Is the  
9 light on on your speaker?

10 MR. BRANDON LEAVITT: It looks like it is. Can  
11 you hear me? Would you prefer this?

12 CHIEF PUBLIC HEARING OFFICER BENSKO: Yes.

13 MR. BRANDON LEAVITT: I won't start over.

14 CHIEF PUBLIC HEARING OFFICER BENSKO: I'm going  
15 a little deaf.

16 Thank you.

17 MR. BRANDON LEAVITT: The disconnect switch, we  
18 don't think it's necessary on small-scale systems and  
19 we primarily do systems from 1 kW to 5 kW. We want  
20 to help people save money, save energy and do it in a  
21 safe and reliable manner and we're never going to  
22 jeopardize the safety of our customers, our crew or

1 the utility workers.

2 Part of the rulemaking creates a lot  
3 of uncertainty and in business what we really rely on  
4 is certainty and it's difficult for us to approach a  
5 customer with unknown costs. It delays their  
6 decision and then when we have to start the paperwork  
7 for the interconnect process, we are also then  
8 delayed applying to the State Department of Commerce  
9 and Economic Opportunity's renewable energy grant  
10 program. That money is a wonderful program, but it's  
11 very limited and our customers lose out on it because  
12 it disappears before we have a chance to get it for  
13 them and that, again, is the delay on the process  
14 that might actually take to the next grant cycle a  
15 year away, so that's another instance where some of  
16 the peg work involved is limiting the opportunities  
17 out there.

18 COMMISSIONER LIEBERMAN: Can I ask you a  
19 question?

20 MR. BRANDON LEAVITT: Yes.

21 COMMISSIONER LIEBERMAN: You say 5 kV system?

22 MR. BRANDON LEAVITT: Yes.

1           COMMISSIONER LIEBERMAN:   Just roughly, what  
2   does that cost?

3           MR. BRANDON LEAVITT:   It's about 35 to \$50,000  
4   depending on the roof type.   We just completed one  
5   last week in Woodstock.   I think it came in 46,000  
6   before incentives, with incentives, that would wrap  
7   it down to around 34.

8           COMMISSIONER LIEBERMAN:   My question is, how  
9   much is -- what does switch to add to that?

10          MR. BRANDON LEAVITT:   I'm not the PV project  
11   manager, I can't give you that exact number.   It's  
12   not a high cost.   It's not a major cost.   There's an  
13   aesthetic consideration, though.   Some people don't  
14   want to see that switch on the outside of their house  
15   if they can avoid it; but, again, the inverter itself  
16   is designed to do the job of the automatic  
17   disconnect.   As soon as the grid goes down, the  
18   inverter shuts off the flow of solar electrons into  
19   the home into the grid.

20          COMMISSIONER LIEBERMAN:   Does anybody know what  
21   the switch is?

22          MR. MICHAEL SHEEHAN:   Michael Sheehan, I'm with

1 IREC, the Interstate Renewable Energy Council, the  
2 typical cost is 3 to \$400 by installers, that's the  
3 numbers I've heard; but when the utility does it, in  
4 Florida, they've quoted a cost \$1,200 to \$1,000.

5 Thank you. We do have an installer.  
6 He was going to testify, he can give you some of  
7 those numbers better than I can.

8 COMMISSIONER LIEBERMAN: I was just curious  
9 what the scale is.

10 MR. BRANDON LEAVITT: So, you know, those are  
11 the major rules that we'd like to see relaxed. I  
12 don't think anyone is going to be in jeopardy because  
13 of it. And we are -- you know, I'm here representing  
14 the small user, the little guy, those are the ones  
15 that need the help the most and we see a roof, we see  
16 an opportunity, we see potential solutions for energy  
17 environment, employment, economic national security  
18 challenges for our country. So anything that you can  
19 do to streamline the process to make things simpler,  
20 less expensive everybody wins.

21 Thank you.

22 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank

1     you, sir.

2                     Dave Merrill.

3             MR. DAVE MERRILL:   Good morning.   It's Merrill,  
4     M-e-r-r-i-l-l.

5                     I'm an installer.   I operate at a  
6     small company called SunAir Systems.   I've installed  
7     43 systems last year under 10-kilowatt size systems.  
8     A lot of these are schools, perhaps 20 of these are  
9     schools.   I'm approaching this meeting as an  
10    installer and as an engineer being in the engineering  
11    industry, I'm always looking at waste and unneeded  
12    effort and when I started to install systems many  
13    years ago, I've seen this disconnect not being used  
14    by any of the utilities.   I see it as an ancient --  
15    if I could approach that as an ancient article.   Back  
16    in the days when farmers were hooking up their  
17    tractors to generators and the potential for feeding  
18    back into the system required that -- the  
19    requirements being written into the industry.

20                    Today, we have modern grid tie  
21    inverters, they operate under the UL Listing 1741 and  
22    those requirements are very rigid, they're strict in

1     reliable tolerances, both in the frequency and  
2     voltage windows, any spikes or sags all have to be  
3     within certain tie requirements and these inverters  
4     will disconnect in two cycles, which is one-thirtieth  
5     of a second. These -- and they've been well proven  
6     out, there's never been an incident where these have  
7     failed. In fact, it's impossible for these inverters  
8     to generate a signal or a 60-hertz signal. They  
9     don't have the capability, they must disconnect. So  
10    they are pretty much a fail-safe unit as they are and  
11    any inverter that's installed under that listing, you  
12    can feel fairly safe that this external service  
13    disconnect, if it was ever used, if a utility guy  
14    could even get there within one-thirtieth of a second  
15    of this power outage, it's going to do the job for  
16    them.

17                   It's -- to me, it's almost like your  
18    appendix. Everyone's got one, no one knows medically  
19    why it's inside of you, but it can cause problems.  
20    In this case, it's extra service time. It takes me  
21    approximately -- it varies, an extra hour to run  
22    conduit to a simple run or it could cause me eight

1     hours. I've spent eight hours to run a disconnect  
2     across the roof and down the side of a three-story  
3     building just for a utility sometimes -- may ever  
4     have to use it.

5                     One particular case -- and I don't  
6     want to take up too much time -- a person in Batavia,  
7     Illinois, they have a local utility that is not --  
8     they didn't have a strict policy or they didn't have  
9     a policy, they looked to ComEd and downloaded a very  
10    basic schematic that showed the disconnect and then a  
11    picture of the house and a picture of the grid and,  
12    so, they required us -- they required the homeowner  
13    to completely disconnect their entire house, their  
14    200-amp service house, go out and install a \$280  
15    switch, hire -- \$500 electrician and the utility to  
16    disconnect from the grid just to fulfill this outside  
17    disconnect requirement. In that case, it was  
18    approaching \$1,500 to fulfill that requirement. Most  
19    normal homes, I agree with the number that the  
20    gentleman mentioned, between 4 to -- 3 to \$400 is  
21    this cost for this appendix.

22                     Now, I do want to make sure that we

1 know that the NEC Code does suggest that there be an  
2 external disconnect, but it does defer to the local  
3 jurisdiction which it has in California, many other  
4 utilities, it does defer that option to them.

5 That's what I wanted to put in at this  
6 point.

7 Thank you.

8 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank you  
9 very much, sir.

10 Frank Mauceri.

11 MR. FRANK MAUCERI: That's close. It's Frank  
12 Mauceri and the last name is spelled M-a-u-c-e-r-i,  
13 I'm a resident of the city of Chicago. My residence  
14 includes a large solar array and also includes the  
15 first legally permitted wind turbines in a  
16 residential neighborhood in the city of Chicago.

17 COMMISSIONER LIEBERMAN: I'm just curious, what  
18 scale are those -- the wind turbines?

19 MR. FRANK MAUCERI: The wind turbines sit about  
20 12 feet above my roof.

21 COMMISSIONER LIEBERMAN: And what's their --  
22 what are they rated in their capacity?



1           MR. FRANK MAUCERI:  It's hard to say because --

2           COMMISSIONER LIEBERMAN:  Roughly.

3           MR. FRANK MAUCERI:  -- of the inability to

4 predict how much wind we'll have at any current time.

5           COMMISSIONER LIEBERMAN:  When they're running.

6           MR. FRANK MAUCERI:  I'm not sure.

7           COMMISSIONER LIEBERMAN:  Just for curiosity.

8           MR. FRANK MAUCERI:  I haven't had an

9 opportunity yet to review the Commission's proposal

10 rules and the comments to those rules and the reply

11 comments, so I'll limit my comments today to the

12 availability of net meters.

13                   A net meter simply is a device by

14 which the amount of electricity coming into a

15 structure and the amount of electricity that that

16 structure produces and sends out onto the grid is

17 netted out thereby providing an additional benefit to

18 the homeowner if the alternative energy systems

19 within that residence are producing more electricity

20 than what the residence needs.

21                   I had -- my system -- the construction

22 of my system was completed, it had passed all

1     electrical and safety codes and inspections and  
2     reviews. My project manager requested from ComEd a  
3     net meter to be installed at the residence so that I  
4     could fully benefit from my system. The initial  
5     request was made in July of last year, we were told  
6     at that time no net meters were available. We  
7     made -- but that -- we would be told by ComEd when it  
8     would be available. We heard no more from them. We  
9     made numerous requests, myself and my project  
10    manager. Each and every time we made a request, we  
11    were told the same exact excuse as to why a net meter  
12    would not be available and that is that they were not  
13    in stock. During that time, of course, as I said, I  
14    was not able to fully benefit from all the benefits  
15    that my system could create for me.

16                   In January -- on January 3rd, I  
17    believe, I called ComEd again; requested the net  
18    meter to be installed; was told that, again, they  
19    were not available, they were not in stock. I -- my  
20    project has received positive publicity both  
21    nationally and locally. So I had an interview  
22    scheduled for the following Monday with the Chicago

1 Tribune on some other issues, green issues within the  
2 building. I told the person at ComEd that if a net  
3 meter wasn't delivered to my house within -- before  
4 that Monday interview, that I would have no choice  
5 but to explain to The Chicago Tribune whatever my  
6 experience was working with ComEd on this particular  
7 issue. Lo and behold, two days later, a net meter  
8 did show up at my residence, was installed; but I  
9 believe that that was the only way I was ever going  
10 to get one.

11 I don't know what the experience of  
12 others are in the city of Chicago when it comes to  
13 the availability of net meters. I have no comment  
14 upon that, but I am hoping that the rules address  
15 this particular issue by requiring the utility to  
16 make a net meter available and install it, say,  
17 within 10 days, 10 working days of a written request  
18 from a homeowner.

19 Thank you.

20 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank  
21 you, sir.

22 I think I can get the next one right.

1     Myra.

2             MS. KAREGIANES:   But you didn't get my last  
3     name, so I will provide a card for the spelling.

4                     First of all, I would like to thank  
5     Bob for arranging this, Commissioner Lieberman for  
6     being present, and Staff for being here; and also, to  
7     thank Staff for the incredible amount of work that  
8     has gone into this rulemaking.  We have come a  
9     considerable distance from the time we started to  
10    here and there are many, many good things in the  
11    rule.

12                    But, first of all, let me -- I just  
13    assume that everybody knew who I was, but I didn't  
14    introduce myself, so here we go.  My name is Myra  
15    Karegianes and I am senior vice president and general  
16    counsel to Recycled Energy Development.

17             CHIEF PUBLIC HEARING OFFICER BENSKO:   But first  
18    you used to be one of us?

19             MS. KAREGIANES:   Yes.  I'm always one of you.

20             CHIEF PUBLIC HEARING OFFICER BENSKO:   That's  
21    good.

22             MS. KAREGIANES:   Always.

1                   Recycled Energy Development is a  
2   company based in Westmont, Illinois, and it's  
3   dedicated to the profitable reduction of greenhouse  
4   gas emissions through the recovery of waste energy  
5   from industrial facilities and conversion into higher  
6   value electric and thermal energy. The company is in  
7   the process of deploying 1.5 billion in industrials  
8   throughout the country and focuses primarily on areas  
9   that significant industrial base and favorable  
10  regulatory environments.

11                  The rules, as drafted, clearly provide  
12  a number of protections for those interconnections  
13  that are 10 megawatts and below. For those  
14  interconnections there that are above that, the rules  
15  have no application whatsoever. So that, frankly,  
16  for my company, the rules do not apply, therefore, we  
17  are in the black hole, as it was indicated earlier by  
18  a couple of the previous speakers.

19                  What we've asked in terms of the type  
20  of applications for those that are 10 megawatts and  
21  above is that the business aspects apply. For  
22  instance, we have not, nor is there a standard for

1     just expediting and running through various frames  
2     without visibility studies, without scoping, without  
3     any number of things that need to get done. So we do  
4     not want, nor is there reason to have the rules that  
5     apply to the larger interconnections be in an  
6     expedited process; but if there is a dispute between  
7     the utility and the interconnection customer, then we  
8     should be able to come to the Commission for an  
9     expedited dispute resolution. If, you know, the  
10    major concern here is --

11           COMMISSIONER LIEBERMAN: Could I ask a quick  
12    question? The way I think the thing is drafted  
13    currently, if you are 10 megawatts and below, there  
14    is an expedited process?

15           MS. KAREGIANES: Correct.

16           COMMISSIONER LIEBERMAN: And if you are 10  
17    megawatts and above, there is none?

18           MS. KAREGIANES: No.

19           COMMISSIONER LIEBERMAN: And the rationale for  
20    that was?

21           MS. KAREGIANES: I think you would have to ask  
22    Staff. I cannot speak for Staff.

1           COMMISSIONER LIEBERMAN: I'm just curious what  
2   the --

3           MS. KAREGIANES: We -- I believe that everybody  
4   is in agreement that FERC only regulates certain  
5   interconnections and it was pointed out earlier that  
6   even an interconnection that's 125 megawatts was  
7   state jurisdictional. So what we're asking for is  
8   basically some of the business explications, like,  
9   the dispute resolution process, if a utility says the  
10  visibility study is going to take a year and we say,  
11  No, it should take three months, we should be able to  
12  come to the Commission to have a dispute resolution  
13  to resolve that issue.

14                   Deposits is another major concern and  
15  the deposits, as drafted, apply to all  
16  interconnections -- well, for up to 10 megawatts.  
17  The deposits require 100 percent deposit with no  
18  interest. The Illinois Commerce Commission, when it  
19  requires residential customers to pay deposits, there  
20  is -- which is only a few hundred dollars or whatever  
21  it may be, there's interest that's required to be  
22  paid by the utility for those deposits. On the ARES

1 side, there's no requirement for deposits, but there  
2 is the requirement for other items, such as a letter  
3 of credit or parent guarantee.

4                   Clearly, those types of vehicles are  
5 available and should be utilized instead of having a  
6 blanket requirement of 100 percent deposit and that  
7 is a significant barrier because large -- larger  
8 installations could run into a million dollars in  
9 terms of deposits. You know, it's not -- it's a  
10 significant barrier and there are business terms that  
11 are just common practice, just common practice. You  
12 buy a house, you put a deposit, you get interest,  
13 you -- whatever you do. So that's another  
14 significant issue.

15                   So, clearly, if the rule were modified  
16 so that the 10 megawatts issue is lifted and it's  
17 simply a state jurisdictional issue, then items like  
18 the dispute resolution -- and hopefully if the  
19 deposits are modified -- deposits, reasonable time  
20 frames would then be applicable to those that are  
21 larger; but as it is, we really are in a black hole;  
22 and as I stated earlier, we look at environments that



1 are regulatory appropriate.

2 Thank you.

3 CHIEF PUBLIC HEARING OFFICER BENSKO: Dave, do  
4 you want to give us the interpretation of why there  
5 is such a split?

6 MR. REARDEN: The first thing is that the IEEE  
7 standard -- and I don't want to try to spell out what  
8 that stands for -- but the IEEE Standard 1547 applies  
9 only up to 10 megawatts and that's why the rule is  
10 limited to that and the -- as far as the dispute  
11 resolution piece of the thing, the way the rule is  
12 written now, the dispute resolution that's in the  
13 rule is not much different than what is available  
14 generally. There's one paragraph where there's a  
15 requirement for an informal meeting between the  
16 parties within 10 business days after receipt of a  
17 written notice; but other than that, it's pretty much  
18 what's available generally.

19 CHIEF PUBLIC HEARING OFFICER BENSKO: All  
20 right.

21 Kathy --

22 MS. KATHLEEN QUASEY: Don't try.

1 CHIEF PUBLIC HEARING OFFICER BENSKO: I hate to  
2 say it, I can't read it, Lindsey. Is it Lindsey?

3 MS. KATHLEEN QUASEY: That's the problem. No,  
4 it's Kathleen Quasey and it's Q-u-a-s-e-y. And like  
5 the others, I want to --

6 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank  
7 you.

8 MS. KATHLEEN QUASEY: You're welcome. No one  
9 gets that right.

10 I want to thank Commissioner Lieberman  
11 for being here and Staff, especially Michael Lannon  
12 and his staff and the hard work collaborative process  
13 they put together for the interconnection rule  
14 development.

15 I'm president of EMI Strategic  
16 Marketing Communications firm that is a designated  
17 defense contractor and has provided consulting and  
18 program management services for the U.S. Department  
19 of Energy's Midwest Regional Association Solar Roof  
20 Initiative and the Chicago Solar Partnership.

21 EMI has also been involved in  
22 advancing market acceptance and intelligent grid

1 technologies and has produced a 10-year solar market  
2 development plan for the state of Illinois. That  
3 plan was fed in by the Illinois Solar Energy  
4 Association, representatives from the City of  
5 Chicago, Argon, Spire Corporation, Solargenix and was  
6 presented to key state policymakers.

7                   The paper recognized that nationally  
8 competitive state interconnection networking and RPS  
9 policies are essential for removing market barriers  
10 to state solar development and for the last year, I  
11 have been serving on the interconnection working  
12 committee to that end.

13                   I'm going to provide some specifics  
14 regarding some of the statements that Myra made. We  
15 request that the ICC modify Article 5.2, the standard  
16 agreement and provisions for deposits that require  
17 100 percent of the estimated nonbinding cost because  
18 this provision is more restrictive than the spirit of  
19 the FERC interconnection process as expressed in the  
20 SGIP order 2006.

21                   FERC recommends -- which, by the way,  
22 that goes up to 20 megawatts, this order 2006,

1 recommends a boilerplate language specifically in  
2 regard to proposals, deposits and voicing payments  
3 and insurance provisions. It requires that all  
4 public utilities subject to it modify their open  
5 access transmission tariffs to include small  
6 generator interconnection agreements and procedures  
7 to, quote, offer a simple process for interconnecting  
8 small generator facilitates with the nation's  
9 electric grid, unquote.

10                   These FERC orders are based on  
11 advancing a mutual interest, both transmission  
12 providers and interconnection customers, in good  
13 faith based on reasonable efforts by both parties,  
14 provide for cumulative, progressive findings as a  
15 result of the FERC recommended four-part study  
16 process and differentiate between the cost deposit  
17 provisions for study and those of a larger volume  
18 inexpensive construction processes.

19                   We also request a refinement to  
20 Section 5.12 to include a formal preapproved change  
21 order process for costs that exceed estimates because  
22 change orders are a common element of cost control

1     for larger construction processes.

2                     The language proposed by ELPC and  
3     Recycled Energy submitted in Appendix C, Article 5,  
4     regarding billing and payment terms should be  
5     considered as well because it notes that the required  
6     deposits may be financially significant, as Myra  
7     said, upwards, you know, a million dollars or  
8     hundreds of thousands of dollars, and as a result,  
9     deposit stipulations are a critical part of the  
10    interconnection customer decision-making processes  
11    and as such, we represent a potential market barrier  
12    to solar industry development.

13                    The terms in the appendix,  
14    specifically 5.2, interconnection customer deposit;  
15    5.21, interest paid on deposits; 5.22, guarantee  
16    payment fund or letter of credit in lieu of deposits;  
17    5.221, guarantee; 5.222, payment bond; and 5.223,  
18    letter of credit, are consistent with the spirit and  
19    intent of the standing FERC orders and goals.

20                    FERC's financial security arrangements  
21    are also more definitive and require the  
22    interconnection customer to provide the transmission

1 provider with appropriate financial security before  
2 construction. Security for payment shall be an  
3 amount sufficient to cover the costs of constructing,  
4 designing, procuring and installing only -- and this  
5 emphasizes -- the applicable portion of the  
6 transmission provider's interconnection facilities  
7 and upgrades and shall be reduced -- my emphasis --  
8 on a dollar-for-dollar basis for payments made to the  
9 transmission provider under the SGIA during its term.

10                   When I called FERC and talked to one  
11 of their staff specialists on this, they called that  
12 to my attention because it reduces the amount of  
13 security that's actually required and the timing  
14 issues is very important.

15                   Financial security can be in the form  
16 of a letter or credit or a surety bond provided by  
17 the interconnection customer that, quote, specifies a  
18 reasonable expiration date, unquote. The  
19 interconnection customer does not have to provide  
20 security over the life of the SGIA; instead, the  
21 interconnection customer need only provide security  
22 until it pays off its obligation to the transmission

1 provider.

2 FERC's four-part study process is

3 inclusive of other interconnection requests that are

4 filed around the same time and probabl- -- I believe

5 in the long-term interest of overall system

6 development; and it, too, emphasizes a pro forma

7 agreement that progressively clarifies the scope and

8 cost of the work. The study process includes an

9 initial scoping meeting and three-standard

10 engineering analyses that evaluate the proposed

11 interconnection, a feasibility study system, impact

12 facilities study and FERC states that, quote, since

13 the period of time between when the study agreements

14 are signed and when the studies are completed in

15 short, we, FERC, expect that including standard legal

16 protections will clarify each party's legal rights

17 under the study agreements and MI's disputes,

18 unquote. So, again, the general idea with FERC is as

19 you move through this study process, that both

20 parties come to some consensus ahead of time on where

21 there are possible problems and expense -- unexpected

22 expenses so a proper decision-making can be made.

1                   The process is detailed as to the  
2   number of days required for the study, deposits,  
3   invoice and payments. Any disputes can be resolved  
4   by contacting FERC's dispute resolution services for  
5   assistance. For example, in Section 24, it  
6   acknowledges that the interconnection customer is  
7   responsible for paying the actual cost of the  
8   interconnection studies regardless of the conclusions  
9   reached; and states that, quote, the feasibility  
10   study requires a deposit of the lesser of 50 percent  
11   of the good faith estimated feasibility study costs  
12   or earnest money of a thousand dollars.

13                  Similarly, Section 10 to Section 11  
14   states that a deposit of the equivalent of the good  
15   faith estimated cost of a distribution system impact  
16   study and one-half of the good faith estimated cost  
17   of a transmission systems impact study may be  
18   required and based on actual costs.

19                  Reference Attachment 6, Section 11,  
20   Appendix 1, study fees shall be based on the  
21   transmission providers actual costs and will be  
22   invoiced to the interconnection customer after the



1 study is completed and delivered and will include a  
2 summary of professional times, so it's inclusive of  
3 overhead.

4 Reference Attachment 6, Section 12,  
5 the interconnection customer must pay any study costs  
6 that exceed the deposit without interest within 30  
7 calendar days of the receipt of the invoice  
8 resolution of any dispute. If the deposits exceeds  
9 any invoice fees, the transmission provider shall  
10 refund such excess within 30 calendar days of the  
11 invoice without interest.

12 And there are time lines that are very  
13 strict. And, again, it's moving towards the spirit  
14 of FERC to speed the process and clarify and surface  
15 issues -- and I'll be wrapping this up -- feasibility  
16 study and distribution system impact study must be  
17 completed and the study reports transmitted within 30  
18 business days.

19 A similar clause pertains to the  
20 distribution system impact study; while the  
21 transmission system impact study must be completed in  
22 45 business days. The facilities study must be

1 completed within 30 business days; however, if  
2 upgrades are required, the facilities study must be  
3 completed within 45 business days and a facilities  
4 study report prepared and submitted within 30  
5 business days.

6 The Commission determined that the  
7 parties can work together to set new deadlines along  
8 the reasons for the change in the records in the SGIP  
9 Section 4.7, if the need arises.

10 The outcomes of the study phase should  
11 fold into the interconnection agreement language and  
12 estimate. So this is all a cumulative process. We  
13 also recommend that the ICC incorporate FERC  
14 references for timing of payments and milestone  
15 schedules as this type of contract structuring  
16 agreement is in accordance with standard business  
17 practices for larger volume construction agreements  
18 and is reflected in standard agreements from other  
19 organizations including NICERTA (phonetic) and the  
20 US DOE.

21 Thanks.

22 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank you

1     very much.

2                     Marjorie Isaacson.

3             MS. MARJORIE ISAACSON:   My name is Marjorie  
4     Isaacson, I-s-a-a-c-s-o-n, and I'm here today from  
5     the Center for Neighborhood Technology, which is a  
6     30-year-old not-for-profit environmental organization  
7     based in Chicago.

8                     CNT appreciates the time and careful  
9     work that has resulted in the current proposed rules  
10    on interconnection.   Expansion of the market for  
11    distributed generation is critically important for  
12    Illinois.   Consequently, it has value for both  
13    consumers and electrical utilities.   As the impacts  
14    of global warming become increasingly evident, the  
15    need for nonpolluting alternative energy resources  
16    becomes more acute and the role of distributed  
17    generation becomes even more relevant.   Therefore,  
18    adopting rules that conform to current best practices  
19    for interconnection is essential.

20                    I'd like to mention that I am the  
21    operator of a 3.6-kilowatt PV system that has been  
22    interconnected to the ComEd grid since 2000.   When

1 I'm busy at work on a hot summer day, my personal  
2 power plant is supplying excess power back to the  
3 grid. Hundreds of homes in Chicago have the  
4 potential to support similar installations that would  
5 help reduce peak load; but building owners who  
6 contemplate making that kind of capital investment  
7 will review all costs carefully. Anything that  
8 reduces the capital investment required will help  
9 increase the numbers of systems installed.

10 For this reason, I urge you to  
11 consider eliminating the redundant disconnect switch  
12 requirements for small inverted base generators. As  
13 has been noted in the study of utility accessible  
14 external disconnect switches by the NREL, utility  
15 arguments requiring utility accessible EDSS may have  
16 been justifiable 5 or 10 years ago; but today, the  
17 EDS issue is effectively addressed by UL and IEEE  
18 standards.

19 It has also been found that there are  
20 significant benefits to utilities from administrative  
21 cost savings by not having to check plans, validate  
22 installation locations and track devices and customer

1 and information and other systems.

2                   The interconnection standards should  
3 do all they can to minimize the economic barriers to  
4 system deployment. By following the best practices  
5 that have shown to be effective in other states in  
6 eliminating the operational and economic burdens of  
7 redundant equipment, interconnection can be achieved  
8 while maintaining safe, reliable and cost-effective  
9 utilities service.

10                   We urge you to consider these  
11 recommendations for uniform substantive  
12 interconnection rules to help Illinois achieve its  
13 renewable energy goals.

14                   Thank you.

15                   CHIEF PUBLIC HEARING OFFICER BENSKO: Thank  
16 you, ma'am.

17                   Jason Keyes.

18                   MR. KEYES: You got it right.

19                   CHIEF PUBLIC HEARING OFFICER BENSKO: Thank  
20 you. Can I leave now?

21                   MR. KEYES: I'm Jason Keyes, an attorney  
22 representing the Interstate Renewable Energy Council.

1     IREC is a nonprofit funded by the DOE to participate  
2     in rulemakings just like this.

3                     In the past year, I've been involved  
4     in interconnection standards in Florida, New Mexico,  
5     Utah, South Dakota and Maryland. And I'll first  
6     note, just on a big picture, is that these rules  
7     aren't just about connecting a few small systems,  
8     they will become critically important. All the  
9     utility costs for traditional generation are going up  
10    the cost. The cost of uranium, coal and natural gas  
11    are all skyrocketing. The cost of steel to build the  
12    plants is skyrocketing. The cost of copper to  
13    transmit the power is skyrocketing. At the same  
14    time, the cost of solar energy, as projected by the  
15    leading solar manufacturers, is to drop by 50 percent  
16    by 2012. So in the next four years, there could very  
17    well be a crossover and you could see an awful lot of  
18    distributed generation coming. So now is the  
19    appropriate time to be creating the rules that will  
20    govern how lots and lots of systems will get  
21    interconnected and I suspect in two or three years  
22    I'll be back to talk about how to change the rules to

1     accommodate all those interconnections.

2                     I'd like to support the comments made  
3     by ELPC and several of the other commenters. I want  
4     to make one point about the expedited process.  
5     Essentially, the rules have an expedited process up  
6     to 2 megawatts, that's the Level 2, so if you meet  
7     certain screens, then you pass through without a need  
8     for further study. I wouldn't say the Level 4  
9     process is expedited, there's a whole series of  
10    studies and that's one of my comments that I'll get  
11    to is that it could take quite a while and be fairly  
12    expensive. But I certainly agree with the comments  
13    regarding beyond 10 megawatts, that the rules should  
14    cover those instead of leaving them in a black hole.  
15    The FERC standard goes up to 20 megawatts using the  
16    same sort of study process, a feasibility study,  
17    impact study and facilities study and the only reason  
18    that the FERC standard stops at 20 megawatts is  
19    because there is a large generator interconnection  
20    procedure for systems above that uses the same sort  
21    of process, so I would encourage you to have a frame  
22    work for looking at those larger systems.

1                   In general, the rules for Levels 1 and  
2    2 -- so systems up to 2 megawatts are very good.  
3    Other than the disconnect switch, which we've talked  
4    about enough here, and accompanying me is Mike  
5    Sheehan, he made a comment before and he'll be  
6    talking about that, but I wanted to touch on a few  
7    points made earlier and then a couple other points.

8                   One is regarding indemnification. I  
9    just support Staff's comments on that in their  
10   initial comments that it's very common to have  
11   bilateral indemnification in the rules. In Maryland,  
12   as was pointed out by Ameren, there is an  
13   indemnification, Maryland doesn't have standardized  
14   agreements and that's where the indemnification comes  
15   in.

16                  And also on the distribution -- Ameren  
17   made the point about the sequencing the distribution  
18   circuit level and we agree with that. Distribution  
19   circuits serves somewhere in the range of 10  
20   megawatts of load. You know, it could be 5  
21   megawatts, it could be up to 15 megawatts, but it's  
22   that general size, and it would be -- at least at



1     this stage of the game, it's going to be pretty rare  
2     that you get a couple of really large installations  
3     happening in the same circuit at the same time and  
4     that there's going to be a need for sequencing; but  
5     if that happens, there should be sequencing. Our  
6     concern before was that you don't need to do  
7     sequencing for the entire utilities distribution  
8     circuit and installation in one place doesn't affect  
9     another 50 miles away.

10                     And, so -- I'll just review the other  
11     points -- first, on the Level 4s, I don't want to go  
12     back over all the time lines and costs that were just  
13     reviewed by the last commenter -- or two commenters  
14     before -- but in general, it helps for those larger  
15     systems, you are talking about millions of dollars of  
16     investment. They need certainty to go ahead with  
17     their commitments to do a project of that size and,  
18     so, they need to know when the project is going to be  
19     approved and roughly how much it's going to cost. So  
20     all the certainty you can add there is helpful.  
21     Right now, there isn't a firm guideline about how  
22     long until the scoping meeting, there isn't a firm

1 guideline about how long each of the studies will  
2 take. There are 10-day windows for when you will  
3 sign an agreement for each type of study, but there  
4 isn't any guidelines for the time. And, so, for  
5 instance, the FERC rules require 30 days for each of  
6 the studies.

7                   And then two other points -- this is  
8 both related to Level 3 and we haven't had a whole  
9 lot of discussion about Level 3, but Level 3 relates  
10 to systems that don't feed back into the grid and in  
11 theory, those rules should be easier because it's not  
12 as complicated if you're not feeding any power back  
13 into the grid. And as it is now, it's not a very  
14 effective policy that's in place in the rules now.  
15 There's two parts to it, so I'll address each of  
16 them.

17                   One is for connections to area  
18 networks. And for area networks, you can have  
19 systems up to 50 kW, but the utility has complete  
20 discretion to say, Actually, we think there might be  
21 adverse impacts on the system and, so, we're going to  
22 deny it and make you a Level 4. So there ought to be

1     some way to have some certainty that you can actually  
2     connect to an area network and not just be shot down.

3                     Also, for area networks, there's a  
4     rule saying either it's 5 percent of the maximum load  
5     of the area network or 50 kW, it could be the total  
6     load on an area network. Area networks, similarly,  
7     can be up to 10 megawatts. 5 percent is 500  
8     kilowatts. So effectively, the rule is limiting it  
9     to 50 kilowatts, which is a very conservative number.  
10    Lots of utility -- lots of states have adopted that  
11    number, but I think there's been enough experience  
12    that you could go with a higher number, 100 or 200; I  
13    would propose 500.

14                    And, finally, the other part of the  
15    Level 3 --

16                    COMMISSIONER LIEBERMAN: Just a quick  
17    clarification?

18                    MR. KEYES: Sure.

19                    COMMISSIONER LIEBERMAN: The Level 3 talks  
20    about systems which don't interconnect but constrains  
21    the scale?

22                    MR. KEYES: I'm sorry --

1           COMMISSIONER LIEBERMAN:  It doesn't feed  
2   into -- it doesn't sell back?

3           MR. KEYES:  Right.  They do interconnect.

4           COMMISSIONER LIEBERMAN:  It's just the customer  
5   side?

6           MR. KEYES:  Right.  So you are just offsetting  
7   your own load.

8           COMMISSIONER LIEBERMAN:  Right.

9           MR. KEYES:  So -- and there's actually what's  
10   called reverse power relays which create an  
11   impossibility of feeding back into the electric grid.

12                        So that addresses some of the  
13   concern -- one of the biggest concerns with DG  
14   systems from the utility side is what if we have more  
15   generation than we have load on a particular  
16   distribution circuit or area network and if you have  
17   that reverse power relay, then you are sure you are  
18   not going to exceed the load.

19                        So the other part of Level 3 has to do  
20   with interconnection to a distribution circuit and it  
21   sounds great, that you can go up to a 10-megawatt  
22   system on a distribution circuit if you have these

1 reverse power relays, but there's a rule that says go  
2 back and look at the screens from Level 2 and the  
3 very first screen in Level 2 is that you can't exceed  
4 the maximum load on the circuit by more than  
5 15 percent. So if the maximum load on the circuit is  
6 somewhere in the range of 10 megawatts, 15 percent is  
7 1.5 megawatts and, so, you are never going to see a  
8 Level 3 applicant that's more than 1.5 or 2  
9 megawatts. And, so, if you're that size, then you  
10 could have done it under Level 2, you didn't have to  
11 have the reverse power relays, the application fees  
12 for Level 2 are lower. So no one is going to apply  
13 under Level 3 and do that. So it should be something  
14 like -- it could be 50 percent standard, it would be  
15 cleaner to drop the percentage of the maximum load  
16 requirement entirely and if there's concern about the  
17 size of system, it could be less than 10 megawatts,  
18 it could be 5 megawatts; but there should be some  
19 realistic use to that Level 3 and right now there  
20 isn't.

21 So thank you very much. And, also,  
22 I'd like to reiterate ComEd's comments that Staff has

1     just done an outstanding job in organizing the  
2     working groups and also putting together the rule.  
3     They've been great.

4                     Thank you.

5             CHIEF PUBLIC HEARING OFFICER BENSKO:   Thank you  
6     very much.

7                     John Kelly.

8             MR. JOHN KELLY:   Hi, John Kelly from Endurant  
9     Energy.   I'd like to thank the Commission and Staff  
10    very much for the opportunity to speak today.   And  
11    Endurant Energy is a developer of clean energy  
12    systems throughout the United States.   We develop  
13    both biogas systems for landfills as well as  
14    cogeneration systems for commercial buildings.

15                    We've just recently completed a  
16    6-megawatt project out at Rockford for a big landfill  
17    and I'll go through the time lines on that just to  
18    give you an idea of how a project goes under the  
19    current -- and I think it will be relevant to  
20    understanding how some of the changes from the  
21    standard Maryland agreement that have been made may  
22    not serve the customers and the Commission and the

1 overall consumer.

2                   Changing market conditions,  
3 specifically real-time pricing, creates a situation  
4 in Illinois where customer owned generation assets  
5 operating in real-time pricing could provide capacity  
6 and ancillary services while only operating 500 to  
7 1,000 hours a year. And I think this is something  
8 that's extremely important for both the utilities to  
9 recognize, is that the market in Illinois has changed  
10 completely and these -- what were considered to be  
11 assets that took the load away from the utility are  
12 now under real-time pricing becoming tremendous  
13 assets for the consumers and for the utilities. We  
14 can see a future in Illinois where upwards of 5  
15 gigawatts of demand response could be provided by  
16 distributed generation. With the right rules, an  
17 interconnect is a critical first step and we believe  
18 this is -- what the Commission has done and the Staff  
19 over the last several years has just -- you've done a  
20 great job.

21                   Unfortunately, the current draft rule  
22 takes several steps back -- let me say one thing.

1 Illinois wisely chose to begin the workshop process  
2 with the drafted Maryland standard which was based on  
3 a model vetted between utility and industry in the  
4 Mid-Atlantic Region and PJM.

5                   Unfortunately, the current draft rule  
6 takes several steps backwards from the workshop  
7 starting point. The current interconnect rule  
8 reduces utility responsibility for managing an  
9 efficient, cost-effective, and timely interconnect  
10 process.

11                   Several standard positions have been  
12 disregarded in the current draft. We urge the  
13 Commission to incorporate industry comments into the  
14 current draft of the Illinois rule, as reflected in  
15 my comments today and in the ELPC, IREC and City of  
16 Chicago filings.

17                   Just a couple examples. The time  
18 frames allocated for utility responses to just about  
19 every step in the rule have been lengthened. One  
20 example specifically, witness test notification must  
21 be into utilities six weeks ahead of time. The draft  
22 originally had four weeks, the Maryland rule had one



1 week, and that's throughout the whole docket and we  
2 really believe that Staff should relook at the  
3 Maryland standard and look at those time lines and  
4 not accept these -- the lengthening that's happened.

5                   Section 466.5, Subsection D, included  
6 requirements that the utility make the results of  
7 prior studies available to new applicants and ComEd  
8 staff. One thing I think that the rule has to  
9 understand is that ComEd loses people, they lose  
10 staff. Sometimes we start an interconnect and we're  
11 dealing with people that have never dealt with the  
12 interconnect in the past. It's critical that we keep  
13 every interconnect study, results available to the  
14 public and to ComEd staff so that we can learn from  
15 our past experiences and utilize those past designs  
16 in the future interconnect process, the critical one  
17 for ComEd and for the industry.

18                   Section 466.100, Level 3 expedited  
19 review, Subsection A-6. Level 3 is meant to address  
20 systems up to 10 megawatts, yet the system size is  
21 limited to 15 percent of the circuit size. Well,  
22 most utility circuits are in the 10- to 15-megawatt

1 range. If we do that, we'll get nowhere near 10  
2 megawatts. So we ask the Commission to really look  
3 at that in terms of, is it 10 megawatts or is it 2  
4 megawatts and if we're going to set that 15 percent,  
5 we might as well make it 2.

6 Section 466, Level 4 review. The  
7 present draft leaves out the language, As part of its  
8 impact study, the EDC shall agree to evaluate and  
9 consider any separate studies prepared by the  
10 applicant. We think that's very important.  
11 Sometimes some innovation could come in from the  
12 applicant and we think it's very important that that  
13 be considered.

14 Those are just a few examples. Now to  
15 help you understand the process, I'll just go through  
16 an interconnect and I -- one, we want to thank ComEd  
17 because the interconnect -- the plant started  
18 operation in December at 6 megawatts, it's producing  
19 energy right now, renewable energy for -- actually, I  
20 was talking to some of the people -- under the Cool  
21 Cities Program, 49 Illinois cities have signed up to  
22 return their carbon levels back to 1990 levels, that

1     have included Rockford, Chicago and Springfield.  
2     Think about that. They're talking about going back  
3     to 1990 levels of carbon. They're going to need low  
4     carbon gas fire generation renewable -- they're going  
5     to need every possible element they can and, so, I  
6     really see the strain that was talked about in terms  
7     of the requests that are going to come to the  
8     Commission for cities to be able to interconnect like  
9     Chicago talked about and get these low carbon assets  
10    deployed is critical, we believe.

11                   So we started the process for this  
12    project that started in December of 2007 -- and I'll  
13    just go through the time line. In June 2006,  
14    Endurant submitted design information for the power  
15    plant electrical system to Commonwealth Edison.

16                   In October of 2006, we submitted  
17    \$10,000 to ComEd as a deposit to begin work on the  
18    interconnect study.

19                   In February of 2007, we provided  
20    additional information to ComEd.

21                   In May of 2007, ComEd's engineering  
22    department provided a cost estimate of \$101,000 for

1 the study.

2 In June of 2007, ComEd provided the  
3 interconnect agreement and construction department  
4 cost estimates for all the work of an additional  
5 \$230,000.

6 In July 31st of 2007, Winnebago Energy  
7 Center, which was the project holding company we  
8 formed to own and operate the project, signed the  
9 interconnect agreement with ComEd. This agreement  
10 specified an estimated total installed cost of  
11 \$331,000 and a completion date of November 15th.

12 By the end of August, WEC completed  
13 site preparation, the powerhouse building, installed  
14 the generators and all support equipment. So we're  
15 sitting there, we have everything on the ground and  
16 we're ready to go.

17 Throughout the months of August,  
18 September and October, the WEC team contacted ComEd  
19 regularly and continuously to request progress  
20 updates and contact people for these updates.

21 On September 20th, ComEd assigned a  
22 project manager and notified us that the new cost was

1     \$640,000. That was on the same day. It was almost  
2     like -- we're not even sure how we did it. WEC did  
3     not -- oh, they also said the schedule would be  
4     slipped to January 31st, 2008. WEC did not accept  
5     the schedule change and ComEd agreed to make  
6     commercially reasonable efforts to compel the project  
7     by the end of November.

8                     On October 16th, WEC held a press  
9     event and we would like to thank Charlie Box for  
10    coming to that press event, as well as nine ComEd  
11    employees that showed up for that press event and the  
12    mayor -- the Mayor's Office from Rockford and a  
13    variety of other delegates.

14                    After that press event, similar to --  
15    you heard from another customer who was going to talk  
16    to The Tribune -- right after that press event,  
17    presto, action. ComEd started fieldwork and  
18    completed -- actually, by December 21st, they  
19    completed the interconnect work, which we are  
20    extremely thankful for. Going beyond January would  
21    have cost us a significant amount in terms of  
22    depreciation tax credits and some other credits that

1 the project would have gotten. So it was absolutely  
2 critical.

3 And we had to get innovative, but  
4 what's lacking and I think what you see in looking at  
5 this process is that we are completely at the  
6 mercy -- there's these rules, these schedules,  
7 everything that's in this interconnect standard is so  
8 critical and we don't believe any small detail should  
9 be left out because the reality is ComEd has a lot to  
10 do, they have a ton of customers, they have huge  
11 system events that come up in the middle of -- while  
12 we're doing an interconnect, there are a lot of  
13 things that can press ComEd in other directions and  
14 this is not a priority, and, so, we always fall to  
15 the very last in terms of priority for their staff  
16 and their staff are busy, they're working their butts  
17 off, they're good people; but if we don't have a  
18 process and we don't have specific guidelines, we  
19 won't get there and we think -- one other thing I'll  
20 mention, which is my last one, is that Section  
21 466.130, records subsection, this section, which was  
22 originally suggested by the ICC Staff at one of the

1 workshops, was intended to provide a check and  
2 balance on how the rule was being implemented.  
3 Again, the proposed draft has removed any utility  
4 performance recording requirements.

5                   We believe the types of schedule I went  
6 through in reporting are critical. There's no way  
7 the Staff will know how ComEd is performing and how  
8 things are going unless you keep a record of the  
9 dates and how long things went. We think that's  
10 extremely important. It's like anything, you measure  
11 for performance and you get performance when you  
12 measure, and, so, we think those metrics are  
13 critical.

14                   I'd like to thank you for the time to  
15 give this and really appreciate the opportunity.

16                   Thank you.

17                   CHIEF PUBLIC HEARING OFFICER BENSKO: Thank you  
18 very much.

19                   Ted Bronson.

20                   MR. TED BRONSON: Bronson, B-r-o-n-s-o-n. My  
21 name is Ted Bronson and I'm here for -- I'm a  
22 consultant working -- supporting the Midwest CHP

1     Application Center.   And the Midwest CHP Application  
2     Center is an organization that's dedicated to leading  
3     the deployment of clean energy technologies and  
4     resources throughout the Midwest.   With the Midwest  
5     CHP application, we've worked closely with ELPC  
6     starting in 2001 with a presentation to the  
7     Commission on the benefits of combined heat and power  
8     and how we were having problems getting systems  
9     interconnected.   We followed up supporting the ELPC  
10    over the years with different workshops and helping  
11    bring together the CHP, the DG -- large DG people to  
12    the table to help comment on these rules.

13                   And just one thing just very quickly,  
14    when we get guys like John Kelly, David Martindale  
15    and others commenting on these rules, they come  
16    here -- this is at an expense of their company.   It's  
17    not covered by any ratepayers, it's not covered by  
18    anything from the State, this hurts their profits  
19    coming here.   So we just would urge that you really  
20    strongly consider the efforts that they put in and  
21    the comments that they put forth.

22                   The first point I'd like to make is



1     that in Illinois, interconnect rule for distributing  
2     energy systems is definitely needed and is long  
3     overdue if the State is serious about being the  
4     leader in energy efficiency and alternative energy  
5     resources. Like John said, this is the first step  
6     towards moving there. This rule is going to really  
7     show if Illinois is going to be serious or not.  
8     Utilities have long opposed the implementation of  
9     such a rule.

10                   They've repeatedly stated in the  
11     workshops during the last year that they have  
12     published procedures for interconnecting and their  
13     actions to implement these procedures are more than  
14     adequate. They contend that nothing is broken. We  
15     strongly believe that there is something broken in  
16     Illinois and we demonstrate that just by looking at  
17     our neighbors as far as the amount of distributed  
18     energy that's been deployed on a  
19     per-electricity-capacity basis. Michigan,  
20     10.5 percent; Minnesota, 9 percent; Wisconsin, 9  
21     percent; Indiana, 7.4 percent; Iowa, 4.1 percent; we  
22     have Illinois coming in at 2.8 percent, much less

1     than those other states even with our strong  
2     industrial base and opportunities for combined heat  
3     and power. So something is wrong here in the state  
4     and I think this is the -- the interconnection rules  
5     is the first step in fixing that.

6                     A fair and equitable set of  
7     interconnection rules would provide CHP developers an  
8     opportunity to look at the state of Illinois as a  
9     place that can do business as opposed to the industry  
10    now looking elsewhere in great part because of the  
11    time delays, unexpected and unexplained costs and  
12    general hassle of doing business in Illinois.

13                    When we presented in 2001, there was  
14    one company that was headquartered in Chicago, one of  
15    the biggest companies in the country that was doing  
16    DG deployment in Boston and in San Francisco, but not  
17    in their home base of Chicago because they were  
18    having problems with interconnect and that was all  
19    documented in our presentation in 2001. We are  
20    providing specific examples to these situations.  
21    Today, you are hearing some more recent examples.

22                    The second point we want to make is

1     that in regards to the draft rule we've been asked to  
2     comment on is that we did ask the Commission to  
3     utilize the Maryland grid interconnection rule as a  
4     straw man, as a starting point in trying to negotiate  
5     a common ground between the utility and DG community  
6     in Illinois. We wanted to use the Maryland rule, not  
7     because it was the best one for DG advocates, but  
8     because it was a model developed with substantial  
9     input from the Mid-Atlantic Region and PJM. As far  
10    as that process, I guess representatives from Exelon,  
11    ComEd and PICO were involved in developing  
12    material -- or that's our understanding -- used in  
13    the Mid-Atlantic Region which was used in the  
14    Maryland Rule and then later the Pennsylvania Rule as  
15    well as the New Jersey Rule. We believe this would  
16    greatly aid in the process of negotiating differences  
17    in Illinois; however, it seems that we've been  
18    mistaken.

19                   Utilities have challenged every  
20    section; in many cases, every sentence of the draft  
21    rule. The result has been a full year of numerous  
22    intense workshops and telephone conference calls that

1     have now resulted in an Illinois Rule and has stepped  
2     considerably backwards from our starting point. The  
3     rule is far -- in our opinion -- far from fair and  
4     equitable to all parties in the state. We are  
5     submitting a revised set of concerns and  
6     recommendations that were originally submitted to the  
7     Commission back in February that outlines many of the  
8     more important issues that have been discussed at the  
9     workshops and left out in the February draft of the  
10    rule.

11                   We're going to attach these in written  
12    testimony that we will provide later on; but a few  
13    examples, the rule provides schedules for both the  
14    applicant and utilities to follow. The rule provides  
15    stiff penalties if the applicant does not comply,  
16    such as dropping to the end of the queue or voiding  
17    the application and starting over again; however,  
18    there are no penalties at all for the utilities. If  
19    they miss the end of their schedules other than the  
20    applicant submitting a formal complaint to the  
21    Commission. This is pretty much the existing process  
22    that we have right now. My understanding is -- we've

1     talked to a few of our developers, that it's a  
2     minimum -- not a minimum, but an average of a  
3     three-month process. I'm not sure if that's what  
4     your experience is.

5                     Secondly, the early draft of the rule  
6     had provisions for dispute resolutions that hopefully  
7     will take care of this that will allow the Commission  
8     to appoint a technical master to resolve disputes.  
9     The wording was such that whoever lost the dispute  
10    would pay all costs. This would keep both the  
11    utilities and the applicant somewhat honest in their  
12    use or abuse of the rule in dispute mechanism. That  
13    provision was dropped and the old method of a formal  
14    complaint to the Commission was reinstated. This is  
15    what we've had for years and it does not seem to have  
16    worked. This has been one of our major points  
17    throughout the years as we've worked with the Staff  
18    on developing these rules.

19                    Finally, the original draft contained  
20    a provision for field-approved equipment, this  
21    provision was intended to avoid duplicate studies and  
22    expenses. Every time there's an application for

1 installation of identical equipment and identical  
2 applications with identical grid situations. Even  
3 Commission Staff issued formal comments stating that  
4 the language can be developed to protect utilities  
5 from approval being too automatic, yet the drafted  
6 rule we are discussing today dropped that section and  
7 leaves out all references to field-approved  
8 equipment.

9 I will stop there. We will reestimate  
10 our industry comments and we just ask the Commission  
11 to reconsider them and take action to get a rule in  
12 place that is fair and equitable to all parties.

13 Thank you very much for your time.

14 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank you  
15 very much.

16 Mike Sheehan.

17 MR. MICHAEL SHEEHAN: Thank you.

18 Michael Sheehan, S-h-e-e-h-a-n, with  
19 the Interstate Renewable Energy Council. A little  
20 bit about my background to make sure that -- to  
21 offset what Jason is, he's the collar guy, I'm the  
22 black-and-white engineer guy, so he's -- Jason and I

1     have worked in several states on interconnections.  
2     My background is I've spent 30 years in the utility  
3     business. I've worked with three different  
4     utilities, including Commonwealth Edison in Chicago  
5     and Virginia Power and 20 years of selling energy.  
6     I'm a consultant now for Interstate Renewable Energy  
7     Council. I'm here to talk about two issues and I'll  
8     be pretty brief.

9                     The first one is the disconnect switch  
10    and the reason I think the disconnect switch is an  
11    appendage and I will go through that issue. First  
12    off, it's redundant to the switches that are required  
13    within the NEC. Nobody is saying that you don't need  
14    NEC. NEC is the National Electric Code, Safety Code  
15    and you do need the switches for the National  
16    Electric Safety Code; they are required. This switch  
17    is in addition to those switches that are required of  
18    the National Electric Code and it's only used by the  
19    utility for the utility's purpose. So it's a utility  
20    sort of requirement; but the interesting thing is  
21    it's on the customer side of the meter, so there's a  
22    jurisdictional issue with utilities operating on the

1     downside of the customer side of the meter.  So  
2     there's an issue that has not been brought up, but I  
3     think it's important from a jurisdictional point of  
4     view and from a liability point of view having a  
5     utility -- IBEW workers who are not qualified working  
6     on the other side of the switch.  So there's an issue  
7     that has not been brought up in the past.

8                     The states -- there are seven states  
9     that have done away with this requirement, there's  
10    over 40,000 systems in the United States and, again,  
11    the Interstate Renewable Energy Council -- our  
12    position is we want to promote safe, renewable energy  
13    processes and to have 40,000 of these photable tape  
14    systems across the country, we believe that's a  
15    statement that we want to keep that pristine record.  
16    The two largest utilities that have the largest  
17    number of photable tape have done away with  
18    disconnect switch.  Pacific Gas Electric and  
19    Sacramento Utility District have both done away with  
20    this switch.  And the reason they did away with the  
21    switch was a practical reason, is because when they  
22    went out there to a feeder with 500 of these PV



1     systems on their feeder, they didn't have 500 locks  
2     to go and lock all these things out. So they found  
3     out they weren't using the switch and it wasn't  
4     useful and they ended up using the meter -- if they  
5     needed to do the disconnect, they used the meter as  
6     the disconnect switch. So it was a practical, if you  
7     do need something, that's what you could do. And in  
8     Florida what they suggested is if the utility really  
9     believes that it's a safety issue, then they can  
10    install the switch at their cost because they believe  
11    it's that -- just for their needs and not the  
12    customer's needs and that's where the \$1,200 came in,  
13    the costs.

14                   We also talk about -- there's been  
15    mention by Ameren about the OSHA rules and I will go  
16    over them. Without going into detail, the OSHA rules  
17    basically require you to isolate, test and ground  
18    unit potential grounds, which you should have, but  
19    isolating and testing -- again, with the PJ&E and  
20    experience and -- Sacramento Utility experience, they  
21    have never found a PV system feeding back because PV  
22    systems today are all UL-certified, anti-islanding

1     and a 10-kV PV system cannot support a grid, it's not  
2     something it can do. It needs the voltage from the  
3     grid to operate and if it's the voltage is not there,  
4     there's an under-voltage relay that takes it out  
5     right away. So it's a -- it hasn't happened, it's  
6     not physically capable of feeding back and typically,  
7     a motor -- a typical air-conditioning motor or a  
8     refrigerator motor, PV systems can't support those  
9     kinds of inrush current type of loads. So typically  
10    they -- they won't be operating back into the grid.

11                    Again, there's 40,000 systems out  
12    there and the biggest argument against the switch is  
13    it's not used. Nobody would have an argument if the  
14    utility used the switch, but everybody has a problem  
15    with the utility demanding the switch but then never  
16    operating the switch and not using it and that's  
17    really the rub, I think, in the process and that's  
18    why it's considered to be such an onerous issue.  
19    And, again, as Jason pointed out, as you go along  
20    and -- three to four years from now when PV gets to  
21    be half of the cost, you are going to have a lot more  
22    in systems out there and a 3 or \$400 cost is

1     significant across the system and that's kind of why  
2     we think the switch is redundant and not needed.

3                     The second issue and I'll just be very  
4     brief with the second issue is a 15 percent screen  
5     for Level 3 and I think our comments, the IREC  
6     comments and the EPC comments address those issues  
7     very well. I won't go into detail here.

8                     Thank you.

9             CHIEF PUBLIC HEARING OFFICER BENSKO: Thank you  
10    very much.

11                    Mark Burger.

12             MR. MARK BURGER: Thank you. And good morning.  
13     Mark Burger, M-a-r-k, B-u-r-g-e-r. I'm president of  
14     the Illinois Solar Energy Association. The ISEA is a  
15     chapter of the American Solar Energy Society and we  
16     are dedicated to educating the Illinois public about  
17     the benefits of solar wind and other forms of  
18     renewable energy.

19                    The ISEA supports the interconnection  
20     proposals put forth by the Environmental Law & Policy  
21     Center, Interstate Renewable Energy Council that are  
22     effective, efficient and in keeping with the emerging

1 renewable energy distributive market.

2                   The stakes are very high. While  
3 Illinois is doing well in large-scale wind farms and  
4 solar thermal installations, the state stands to be  
5 left in the dust in the solar photovoltaic and  
6 small-scale wind industries. While Illinois is the  
7 sixth largest energy user in the United States at 4  
8 percent of national consumption, it is well under 1  
9 percent in small scale wind and photovoltaic  
10 systems, small scale being defined under 100  
11 kilowatts of nameplate capacity.

12                   The solar photovoltaic industry is  
13 growing in the U.S. at a 50 percent rate with just  
14 last year alone over 150 megawatts of capacity  
15 installed and additional 14,000 interconnections.  
16 The small wind industry is growing at a 25 percent  
17 rate with over 5,000 installations.

18                   These tens of thousands of  
19 installations will soon grow to hundreds of thousands  
20 of installations across the United States. With both  
21 technologies, Illinois is not in the top 10 states or  
22 anywhere near it and the -- our present rate right

1     now is only a few dozen installations of both  
2     technologies of a few hundred kilowatts of capacity.

3                     Over a dozen states including small  
4     capacity -- small states like Oregon or Connecticut  
5     are installing many megawatts of capacity each year  
6     and policies from emerging renewable energy states  
7     like Ohio and Florida may further isolate Illinois  
8     from taking part in a significant share of these new  
9     technologies.

10                    A truly efficient and nonobstructive  
11     interconnection and net metering standard will enable  
12     Illinois to have a significant photovoltaic and  
13     small wind power market that will result in less use  
14     of increasingly expensive imported peak electric  
15     generating fuels like natural gas, improve electric  
16     grid reliability, grow new industries and creates  
17     jobs, assists in the compliance in Illinois'  
18     renewable portfolio standard and also result in low  
19     renewable energy system costs to consumers.

20                    Thank you.

21                    CHIEF PUBLIC HEARING OFFICER BENSKO:   Thank  
22     you.

1 David Martindale.

2 MR. DAVID MARTINDALE: Hello. David Martindale  
3 representing Ballard Engineering. I've been a design  
4 builder of cogeneration systems for the past 22 years  
5 ranging from 500 kW up to 8 megawatts. I'm not going  
6 to address all the legal entities of the proposal or  
7 your rules. I want to tell you a quick story on why  
8 rules are necessary.

9 Roughly five years ago, we installed a  
10 2 and a half megawatt power system running on  
11 digester gas and we started the process with ComEd  
12 giving us an interconnection cost of \$70,000. A  
13 couple months later, it escalated to \$270,000. We  
14 appealed to the ICC and that process did not prove  
15 fruitful. These types of costs ended up in almost a  
16 year's time delay in getting the project done and the  
17 local utility wouldn't accept any alternatives and we  
18 had no recourse to cause them to accept any  
19 alternatives. So these rules -- this rulemaking  
20 process is extremely important to me because we  
21 haven't installed a single cogen system of this size  
22 in the last five years primarily due to

1 interconnection costs. These time delays and high  
2 costs and not having any options leave me to believe  
3 that the conflict resolution process that is alluded  
4 to and stated here in this rulemaking process must be  
5 independent and effective. Now, who and how that  
6 works out, I would like to see that happen, but it  
7 has to be real, okay. It can't be dictated by the  
8 rules that I've lived with for 15, 20 years, which is  
9 ComEd's blue book simply being rewritten into an ICC  
10 format. It doesn't really help me and help my  
11 customers install cogeneration systems because I  
12 can't have the utility simply saying that won't work  
13 and not accept -- not accepting or having any  
14 recourse to make this happen.

15 I do support the ELCP and the Midwest  
16 Application Center's suggestions. I'm very  
17 frustrated with this 100 percent deposit issue. I  
18 agree with the comments I heard earlier about the  
19 Level 3 and the 15 percent limits throwing it  
20 actually back to a Level 2. It's honestly quite  
21 confusing. We simply need the utility to standardize  
22 interconnection and respond in a timely manner. Six

1 months to a year delay on a cogeneration system  
2 installation will kill the projects and because of  
3 past experiences with customers in this industry and  
4 other industries, the word does get out that you want  
5 to install a cogen system because it's energy  
6 efficient and it's profitable and you can use it in a  
7 deregulated market, great. Why not do it? Oh, well,  
8 you've got to get past the utility. Lots of projects  
9 have died. In my opinion, this process is 10 years  
10 late. We need to get on with it and make it a real  
11 process.

12 Thank you.

13 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank you  
14 very much.

15 Mike Johnson.

16 MR. MICHAEL JOHNSON: Mike Johnson,  
17 J-o-h-n-s-o-n, executive director Illinois Solar  
18 Energy Association. I just want to thank you for the  
19 opportunity on behalf of our 500 members statewide to  
20 address a lot of these important issues today. As  
21 has been mentioned, a lot of important progress has  
22 been made, but what lies ahead of us is really a very



1     important opportunity to determine how relatively  
2     easy or difficult facilitating a clean energy future  
3     in Illinois is going to be for both homeowners and  
4     businesses; and in doing that, just to echo the issue  
5     that -- the disconnect switch and to put that into  
6     context, while we're hearing costs of, say, a \$1,000,  
7     they might not seem all that significant when you're  
8     talking about a 10, 20, \$30,000 installation; but  
9     when you consider that a lot of the people who are  
10    installing these installations are financing these  
11    installations from the get-go with their home equity  
12    lines of credit, with whatever money they can scrape  
13    together, and the fact that \$1,000 is half the  
14    incentive that you can get from the federal  
15    government to do this, it just becomes an issue of if  
16    we're throwing \$1,000 at something that's  
17    unnecessary, it's taking away half of that or in some  
18    cases, up to 5 years of the revenue that these  
19    systems can generate from that metering. So it's --  
20    it's not insignificant, especially on the residential  
21    scale.

22                   So, I mean, as my colleague Mark

1     Burger had mentioned, you've seen a sharp up taking  
2     interest and that, really, I think is the crux of  
3     what we're talking about here is the future, not  
4     necessarily the way things have been in the past, but  
5     the way things will likely be in the face of climate  
6     change and also just in terms of job development  
7     throughout the state. As we've seen interconnection  
8     policies in states like California have made a  
9     difference both in terms of reliability and in terms  
10    of the provision of clean energy throughout the  
11    state.

12                   One of the other important  
13    opportunities that I think is -- that hasn't really  
14    been highlighted fully here -- is the opportunity to  
15    create jobs in Illinois. Many of our members are  
16    installers themselves which, I might add by the way,  
17    who are staking their reputation on the safety of  
18    these systems and, you know, when there are  
19    constraints there, there are constraints to economic  
20    development, there are constraints to clean energy.  
21    And we, at IC, are definitely excited about playing  
22    the role of providing that clean energy through, you

1 know, through our members, whether it's on the  
2 installation side or whether it's on the household  
3 side helping the utilities green their energy supply  
4 and also helping to create jobs throughout the state.

5                   As the City of Chicago recently  
6 mentioned in their climate action plan, they estimate  
7 that clean tech can -- in order to mitigate climate  
8 change, can generate up to 5 or 10,000 jobs annually,  
9 which is in comparison to 50,000 jobs that are added  
10 to the Chicago economy every year currently.

11                   So, I mean, obviously, this is a key  
12 opportunity not only to support clean energy, but job  
13 development and energy independence which I think  
14 have all been issues central to public policy in the  
15 state of Illinois and throughout the country; but in  
16 order to do that, as we've heard today, we need  
17 certainty, we need codification of these standards so  
18 there isn't an unworkable situation that's left to  
19 interpretation. We certainly understand the  
20 administrative burden that this places on the  
21 utilities and we're looking to go through that as  
22 efficiently as possible. We don't want to tie up

1 people's time unnecessarily and neither do the  
2 utilities. So I think we're all in agreement on  
3 that.

4 And I think we're all also in  
5 agreement that clean tech is going to happen in this  
6 country and as we've seen happen, most of it has  
7 happened in California, New Jersey and Massachusetts  
8 and states that have favorable policies in place and  
9 that can happen here in Illinois with the right  
10 policies. And in doing that, in creating a solid  
11 transparent framework, it will also make it -- make  
12 the state's investments through the Department of  
13 Commerce and Economic Opportunity and other  
14 foundations throughout the state more effective in  
15 leveraging clean energy investment in the state of  
16 Illinois.

17 So with that, I thank you.

18 CHIEF PUBLIC HEARING OFFICER BENSKO: Thank you  
19 very much.

20 Is there anyone that has not spoken  
21 that wishes to at this time?

22 (No response.)

1                   Going once, going twice.

2           MR. ROBERT VOGEL:   I'm Bob Vogel (phonetic)

3   with the Illinois Renewable Energy Association and we

4   hear a lot of concerns from our members who want

5   systems installed about the procedures, the delays

6   and the costs and they're particularly concerned

7   about the redundancy on the safety issues.   So I

8   don't think there's any more that I want to add.

9           CHIEF PUBLIC HEARING OFFICER BENSKO:   Thank you

10   very much.

11                   Anyone else?

12                   (No response.)

13                   Seeing none, I will excuse the court

14   reporter and then if you'd like, we could do some

15   question and answer.   Is there anyone in the audience

16   that would like that?   Let's take -- come back at

17   noon.

18                   (Which were all

19                   the proceedings had.)

20

21

22